



DEPARTMENT OF THE NAVY  
NAVAL AIR SYSTEMS COMMAND  
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS  
1421 JEFFERSON DAVIS HWY  
ARLINGTON VA 22243-5120

IN REPLY REFER TO  
NAVAIRINST 4120.9  
AIR-4.1C  
15 Apr 96

NAVAIR INSTRUCTION 4120.9

From: Commander, Naval Air Systems Command

Subj: APPLICATION AND TAILORING OF PROGRAM PECULIAR PROCUREMENT  
SPECIFICATIONS WITHIN THE NAVAL AIR SYSTEMS COMMAND

Ref: (a) ASN(RD&A) Memorandum of 22 December 94  
(b) SD-24, General Specification Performance, Design Characteristics, and Construction of Aircraft Weapon Systems  
(c) SD-8706, General Specification for Design Examinations, Engineering, Aircraft Weapon Systems  
(d) MIL-D-8708, Military Specification, Demonstration Requirements for Airplanes  
(e) MIL-D-23222, Military Specification, Demonstration Requirements for Helicopters  
(f) SD-90 General Specification for Design and Construction of Air Launched Guided Missiles  
(g) SD-91 General Specification for Design Examinations of Air Launched Guided Missiles  
(h) AV-10000 Format for Naval Air Systems Command Avionic System Performance Specifications for Weapon Systems  
(i) MIL-JSGS-87231 Gas Turbine Engines, General Specification For  
(j) MIL-D-8685 Data and Tests, Engineering: Contract Requirement for Guided Missile Target Systems  
(k) MIL-G-18232 General Specification for the Design and Construction of Aerial Powered Targets

Encl: (1) Waiver Request Format Sample  
(2) Specification Certification Form and Cover Page Sample  
(3) Specification Sequence Numbers Responsible Office  
(4) Specification Change Notice, DD Form 1696

1. Purpose. This instruction establishes policy and procedures, and assigns responsibility for the preparation, tailoring, and approval of procurement specifications used for acquisitions managed by the Naval Air Systems Command. This instruction applies to the preparation of program peculiar specifications, but does not apply to the preparation of specifications and standards developed under the Defense Standardization Program.



15 Apr 96

2. Background. Procurement specifications describe how and under what conditions the system or equipment is required to perform, the characteristics and constraints that govern its operational use, and the provisions for determining compliance with requirements before acceptance. Reference (a) requires that procurement specifications be performance based and that imposition of military specifications and standards be avoided to the extent practicable. Reference (a) further requires that contractors be encouraged to propose alternate solutions and procedures to military specifications and standards suggested or imposed by the Government. References (b) through (k) are guide specifications that provide a framework from which to construct procurement specifications.

3. Policy

a. All Type Specifications and System Specifications used in acquisition programs will be prepared, tailored, reviewed, and approved by the assigned program management team following the process described herein.

b. All Type Specifications will be performance based and structured to reflect only the minimum program requirements. Technical requirements will be stated directly; indirectly stated requirements will be avoided. Unless unique circumstances warrant, specific design solutions will not be imposed.

c. To the maximum extent practical, only performance specifications will be used as first tier references in specifications. The use of non-military specifications and standards is preferred. The following guidelines apply to the use of military specifications and standards:

(1) Reference (a) requires that waivers must be obtained from the milestone decision authority for certain military specifications and standards referenced as requirements. A waiver request will be submitted, per reference (a), to the milestone decision authority for each military specification and standard requiring a waiver. Waivers must be approved by the decision authority prior to final specification approval and signature. Enclosure (1) provides a format for waiver requests.

(2) To the extent practical, military specifications and standards referenced as requirements will be limited to those listed in the Department of Defense Index of Specifications and Standards (DODISS) as performance specifications, interface standards, standard processes or those defining unique military interfaces, equipments, or critical requirements. Examples

include common equipment, unique military devices (e.g., catapult launch bar), military unique natural or induced environments (salt spray, electromagnetic environment, etc.), ship suitability, weapons and stores compatibility, operator and maintainer requirements, and unique safety and flight clearance requirements.

(3) Requirements from referenced documents should be converted to performance based statements and inserted into the specification. As a last resort, only the specific paragraphs or sections required within a referenced document will be imposed.

d. References (b) through (k) guide specifications will be used, as appropriate, to develop Type and System Specifications.

e. Specifications will be structured to allow prospective offerors to identify and submit, in their proposals, ideas for additional cost-effective tailoring of cited specifications and standards, or alternate solutions to the Government's needs.

#### 4. Definitions

a. Performance Specification. A performance specification states requirements in terms of required results with criteria for determining compliance, but without stating the methods for achieving the required results. A performance specification defines the functional requirements for the item, the environment in which it must operate, and the interface and interchange requirements.

b. Guide Specification. Guide specifications identify all standard recurring requirements for developing new systems, subsystems, or equipment. They are structured to force tailoring and are intended to assist in preparing development specifications for specific end items.

c. Type Specification. A Type Specification is a highly tailored version of a guide specification. Type Specifications are performance specifications developed from guide specifications and the Operational Requirement Document for a specific system or equipment. Top level, minimum, performance requirements are included. Type Specifications do not mandate Government processes or manufacturing procedures. Design independent requirements are included, however, design dependant requirements that may eventually be necessary to fully describe

the end item are not included. Test requirements may be included in the Type Specification or included in separate specifications (i.e., addenda to guide specifications SD-8706 or MIL-D-8708).

d. System Specification. A System Specification is an expanded version of the Type Specification that includes all general and unique performance requirements that are critical to the operational and technical acceptability of the design. System Specifications include all performance values, design dependant requirements, and other information adequate to technically describe the end article. Test requirements may be included in separate specifications (i.e., addenda to guide specifications SD-8706 or MIL-D-8708). Reference to System Specifications, herein, includes the item specification and the test requirements when those requirements are contained in a separate specification.

e. Tailoring. Tailoring is the process by which individual requirements of selected specifications and standards are evaluated to determine the extent to which each requirement is most suitable for a specific acquisition, and the modification of those requirements, where necessary, to ensure that each tailored document invoked states only the minimum requirements of the Government.

f. Military Specifications and Standards. Military specifications and standards are any specification or standard prepared by the Department of Defense and listed in the DODISS (i.e., MIL-A-1234 or MIL-STD-1234 or MIL-HBK-1234).

5. Procedures. The procedures below govern the preparation, tailoring, and approval of specifications and related addenda:

a. Specifications will be prepared by an Integrated Program Team (IPT) under the direction of the program manager. Key members of the program manager's team will review the specifications for completeness, accuracy, and compliance with policy and will recommend that the specification be approved for execution by the program manager or the appropriate, delegated IPT leader. Enclosure (2), Specification Certification Form and Specification Cover Page, will be used to document the certification and approval process.

b. The Assistant Program Executive Officer (Engineering) (APEO (ENG)) or Assistant Program Executive Officer (Logistics) (APEO (LOG)) will convene an Independent Specification Review Board to review draft specifications and proposed specification changes prepared by the program team.

15 Apr 96

c. The program manager or the appropriate IPT leader, as delegated, will approve the specifications before inclusion in solicitations or contracts.

d. All specifications and related addenda will be identified by sequence numbers, assigned by the appropriate competency (see Enclosure (3)).

e. Type Specifications and related addenda will be used as guidance during Concept Exploration and Demonstration/Validation phase contracts. Type Specifications and related addenda will normally be issued as part of the competitive solicitation package for Engineering and Manufacturing Development.

f. System Specifications and related addenda will normally be required as part of each offeror's response to requests for proposals for Engineering and Manufacturing Development. The specification proposed by the successful offeror will be reviewed by the program team and certified and approved by the program manager or the IPT leader, as delegated, before contract award. System Specifications will be invoked in Engineering and Manufacturing Development and production contracts and are contractually binding.

g. Specification changes, resulting from Engineering and Manufacturing Development detail design, will be identified and documented using the Specification Change Notice format (Enclosure (4)). The program manager or appropriate IPT leader, as delegated, will approve the Specification Change Notice by signature. The program team will process Specification Change Notices via a Procurement Initiation Document.

h. For production, the System Specification used for development will normally be updated with all approved specification change notices, assigned a new number, approved by the program manager or appropriate IPT leader, as delegated, and invoked in the contract of the first production lot. System Specifications and addenda for procurement of subsequent lots will incorporate all approved specification change notices, be assigned a new number, and approved by the program manager or the appropriate IPT leader, as delegated. Approval of specification change notices will be as noted in paragraph 5.g. above.

## 6. Actions

a. Program managers or IPT leaders, as delegated, will:

(1) assign an IPT the task of preparing specifications under their cognizance;

(2) request expert assistance from the competencies, as appropriate, to assist the IPT in developing specifications and reviewing offeror's proposed alternatives to military documents;

(3) ensure that any necessary waivers are obtained from the milestone decision authority for the use of certain military specifications and standards referenced as requirements;

(4) ensure program team review of the specification per enclosure (2);

(5) request the appropriate APEO to establish and chair an Independent Specification Review Board;

(6) coordinate the review and approval of specification changes; and

(7) approve, by signature, specifications under their cognizance for execution of the program as defined in the acquisition program baseline.

b. Assistant Program Manager Systems Engineering (APMSE), Assistant Program Manager Logistics (APML), or lower tier IPT lead engineer, as delegated, will:

(1) assemble all documents relevant to the procurement (e.g., requirements documents, guide specifications, acquisition plan);

(2) establish plans, define required IPT member actions, solicit team inputs, obtain specification numbers, maintain schedules for specification development and approval, and ensure that the schedule supports that established in the Procurement Planning Conference;

(3) coordinate with competency managers, if required, for any additional technical expertise;

(4) resolve comments and issues;

(5) certify to the program manager that the specifications provide the technical requirements and characteristics necessary to meet the Operational Requirement Document and that the specifications comply with the DoD policy on the use of military specifications and standards using the enclosure (2) certification form;

(6) provide the completed certification form to the program manager as a permanent record of team concurrence; and

(7) certify that specifications and specification changes prepared by their IPT's are complete, accurate, and compliant with policy.

c. IPT members will:

(1) provide or review, as appropriate, the program requirements in their fields of expertise and ensure that performance requirements are stated in consistent, understandable, and effective terms;

(2) review comments in their area of expertise during specification preparation; and

(3) seek advice and counsel of senior competency personnel on matters beyond the individual member's expertise or authority.

d. Competency managers will:

(1) ensure that supporting procedures and guidelines are available for generating quality specifications;

(2) maintain guide specifications, e.g., references (b) through (k), and issue periodic updates;

(3) assist the program manager in tailoring the specification development process, where appropriate, for specific procurements, if requested by the program manager or IPT leader;

(4) assist the program team in preparing and reviewing specifications and related addenda, if requested by the program manager or IPT leader;

(5) coordinate the assignment of specification functional area experts with the program manager or IPT leader;

(6) assist IPT's in developing specifications and evaluating proposed alternatives to military documents, where appropriate;

(7) maintain records (library) of approved Type Specifications, System Specifications, and related addenda for reference and use as examples for future specifications;

(8) assign specification numbers;

(9) ensure competent, trained personnel are assigned to prepare specifications;

(10) assign appropriate personnel as members of Independent Specification Review Boards, when requested by the APEO;

(11) develop and maintain a cadre of specification expertise sufficient for training and nurturing of competency personnel, support of IPT's and support of Independent Specification Review Boards; and

(12) at appropriate intervals, (AIR-4.1 only) update the process requirements of this instruction.

e. Independent Specification Review Boards will:

(1) be established and chaired by the appropriate APEO;

(2) review, evaluate, and recommend for approval or disapproval specifications prepared by the IPT;

(3) consult with competency managers when additional expertise is required;

(4) ensure that all specification comments and proposed alternatives to military documents submitted in proposals by industry are reviewed and evaluated;

(5) resolve non-concurrence within the IPT, if possible. If unable to do so, forward the issue through the competency and IPT chains of command for resolution; and



(6) certify the above by signing the enclosure (2) certification form and providing it to the program manager to become a permanent record of board concurrence.

f. The APEO(ENG) or APEO(LOG) will establish and chair Independent Specification Review Boards.

7. Review. AIR-4.1C shall review annually the contents herein and provide recommendations for changes and deletions to the Commander.

8. Form. DD1696, (4-92) Specification Change Notice, S/N: 0102-LF-015-9600, is available in the Navy Supply System and may be requisitioned per CDROM NAVSUP Pub 600(NLL).



J. A. LOCKARD

Distribution: FKA1A (established quantity)  
SNDL: A1J1A, A1J1B, A1J1C, FKA1A (Deputy Commanders, Assistant Commanders, Comptroller, Command Special Assistants, Designated Program Managers, Directorate Directors, and Office and Division Directors)

Copy to: (2 copies each unless otherwise indicated)  
SNDL: C21 (1 copy); FKA1A (AIR-7.2.5.4 (20 copies), AIR-7.2.5.2 (5 copies), AIR-4.1C (5 copies)

Stocked: NAVAIRHQ (AIR-7.2.5.4)

**SAMPLE**

**WAIVER REQUEST FORMAT**  
(Limit 2 pages)

WAIVER LEVEL		WAIVER APPLICABILITY
.....	OSD	..... Applicable to all Programs (Class)
.....	Navy	..... Program-Specific (Individual)

**WAIVER REQUEST #** (to be added by coordinator)

**WAIVER REQUEST:** Specifically, identify the Statute, Regulation, Directive, Manual, etc., for which you are requesting (or gave) a waiver. Specifically, identify the part, paragraph, etc. Waiver request should describe where the waiver will be applied (a specific program or contract) and for what period of time, i.e., Waiver to permit the use of MIL-STD-XXXX, Title)

**Submitter:** (for Class Waiver)

**Program Information:** (for Specific Waiver)

Program:

Solicitation No.:

POC:

Phone No.:

**Rationale for Waiver Requested:**

(Narrative must support the request action)

**Benefits to be Accrued:**

(Include considerations of cost savings, schedule reduction, system performance improvement, etc.)

**Possible Risks Introduced:**

(Must state the impact of approving or not approving the waiver request. Include considerations of cost overruns, schedule overruns, system performance degradation, etc.)

**Recommendations:**

(Specific language, if possible.)

Enclosure (1)

SAMPLE

This form will be tailored to fit the planned procurement and used to document acceptance of the specification by appropriate program team personnel before final signature of the document.

SPECIFICATION NO.           \*          

SPECIFICATION CERTIFICATION FORM

(EXAMPLE)

<u>MEMBER</u>	<u>RESPONSIBILITY</u>	<u>CONCURRENCE</u>
Specification Review Board Chairperson (APEO)	Certifies board review	_____
IPT leader	Certifies specification acceptable for execution of the program within the scope of resources allocated	_____
APMSE	Overall Technical rqmts Certifies minimum and sufficient technical requirements and characteristics necessary to meet the Operational Requirement Document and compliance with DoD policy	_____
APML	Overall Logistics rqmts	_____
Air Vehicle Lead Engr	Air vehicle perform rqmts	_____
Avionics Lead Engr	Avionics perform rqmts	_____
Propulsion Lead Engr	Propulsion perform rqmts	_____
Weapons Lead Engr	Weapons perform rqmts	_____
Crew Systems Lead Engr	Crew Systems perform rqmts	_____

\* Assigned by the appropriate competency

Enclosure (2)

SPECIFICATION NUMBER  
DATE

DEPARTMENT OF THE NAVY  
NAVAL AIR SYSTEMS COMMAND  
ARLINGTON, VA



This specification is approved for execution of the XXX program as defined in the acquisition baseline dated XXX.

SIGNATURE \_\_\_\_\_  
XXX Program Manager

SPECIFICATION SEQUENCE NUMBERS

RESPONSIBLE OFFICE

<u>DEPARTMENT</u>	<u>SPECIFICATIONS</u>
3.1	INTEGRATED LOGISTICS SUPPORT AND SELECTED TRAINING EQUIPMENT AND SYSTEMS
4.1	AIRCRAFT SYSTEMS
4.3	AIR VEHICLE EQUIPMENT, FLIGHT CONTROL SYSTEMS AND EQUIPMENT
4.4	AIRCRAFT ENGINES, ELECTRICAL POWER EQUIPMENT
4.5	AVIONICS EQUIPMENTS AND SUBSYSTEMS
4.6	CREW SYSTEMS AND EQUIPMENT
4.7	WEAPONS AND TARGETS
4.8	SUPPORT EQUIPMENT, AIRCRAFT LAUNCH AND RECOVERY EQUIPMENT
4.9	TRAINING EQUIPMENT AND SYSTEMS

Enclosure (3)

SPECIFICATION CHANGE NOTICE (SCN)			1. DATE (YYMMDD)	Form Approved OMB No. 0704-0188	
<p>Public reporting burden for the collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0204-0186), Washington, D.C. 20543. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO EITHER OF THESE ADDRESSES. RETURN COMPLETED FORM TO THE GOVERNMENT ISSUING CONTRACTING OFFICER FOR THE CONTRACT/PROCURING ACTIVITY NUMBER LISTED IN ITEM 2 OF THIS FORM.</p>			2. PROCURING ACTIVITY NO.		
			3. DODAAC		
			4. ORIGINATOR		
a. TYPED NAME (First, Middle Initial, Last)			5. SCN TYPE PROPOSED	APPROVED	
b. ADDRESS (Street, City, State, Zip Code)			6. CAGE CODE	7. SPEC NO.	
			8. CAGE CODE	9. SCN NO.	
10. SYSTEM DESIGNATION	11. RELATED ECP NO.	12. CONTRACT NO.	13. CONTRACTUAL AUTHORIZATION		
14. CONFIGURATION ITEM NOMENCLATURE			15. EFFECTIVITY		
<p>This notice informs recipients that the specification identified by the number (and revision letter) shown in item 7 has been changed. The pages changed by this SCN are those furnished herewith and carry out approval date of the related ECP listed in item 11. The pages of the page numbers and dates listed in items 16 and 17, combined with non-listed pages of the original issue of the revision shown in item 7, constitute the current approved version of this specification.</p>					
16. PAGES AFFECTED BY THIS SCN			TYPE OF CHANGE*	APPROVAL DATE (YYMMDD)	
PAGE(S) a.			b.	c.	
17. SUMMARY OF PREVIOUSLY CHANGED PAGES			DATE SUBMITTED (YYMMDD)	TYPE OF CHANGE*	APPROVAL DATE (YYMMDD)
SCN NO. a.	RELATED ECP NO. b.	PAGE(S) c.	d.	e.	f.
***S** Indicates supersedes earlier page. "A" Indicates added page. "D" Indicates deletion					
18.a. GOVERNMENT ACTIVITY		C. SIGNATURE		d. DATE SIGNED (YYMMDD)	
b. TYPED NAME (First, Middle Initial, Last)					